



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/055,492	10/29/2001	Matthew Steward Gebhard	A01125	7481
21898	7590	05/17/2004	EXAMINER	
ROHM AND HAAS COMPANY PATENT DEPARTMENT 100 INDEPENDENCE MALL WEST PHILADELPHIA, PA 19106-2399				REDDICK, MARIE L
ART UNIT		PAPER NUMBER		
		1713		

DATE MAILED: 05/17/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	10/055,492	GEBHARD ET AL.
	Examiner	Art Unit
	Judy M. Reddick	1713

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 02/09/04 & 02/18/04.
 2a) This action is **FINAL**. 2b) This action is non-final.
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-12 is/are pending in the application.
 4a) Of the above claim(s) 6-10 is/are withdrawn from consideration.
 5) Claim(s) _____ is/are allowed.
 6) Claim(s) 1-5, 11 and 12 is/are rejected.
 7) Claim(s) _____ is/are objected to.
 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____. |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>04/22/04</u> . | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| | 6) <input type="checkbox"/> Other: _____. |

DETAILED ACTION

Election/Restrictions

1. **Applicant's election of the Group I(claims 1-5, 11 & 12(newly added)) in Paper No. 02/09/04 is acknowledged.**
Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)). Accordingly, claims 6-10 remain withdrawn from consideration by the Examiner as per having been drawn to a non-elected invention.

Information Disclosure Statement

2. **The information disclosure statement filed 04/22/04 have been considered and scanned into the application file.**

Claim Rejections - 35 USC § 112

3. **The following is a quotation of the first paragraph of 35 U.S.C. 112:**
The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.
4. **Claims 1-5, 11 & 12 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. As far as the Examiner can tell, no iron clad support can be found for the limitation "wherein said emulsion polymer is made without the use of chain transfer agents" per claims 1 & 4, as amended, and this, as such, plausibly engenders a New Matter situation.**

Claim Rejections - 35 USC § 102

5. **The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:**

A person shall be entitled to a patent unless –

Art Unit: 1713

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1-5 stand rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Rokowski et al(U.S. 5,534,310).

Rokowski et al disclose a latex binder suitable for producing high gloss coating, with improved adhesion, on weathered substrates which include architectural coatings, such as exterior house paints, mastics and caulk, and industrial maintenance coatings for metal, such as exposed structural steel on bridges, above-ground storage tanks, etc., which are exposed to incident sunlight and outdoor conditions and coatings which are exposed to incident sunlight such as a building, marble and terrazzo, concrete, stone floors, etc. and a method for producing such coatings. More specifically, Rokowski et al disclose a coating composition comprising a latex binder comprising an aqueous evaporable carrier having dispersed therein a latex polymer(governed by an acid number of 1 to 70 and an average particle size of 30 to 800 nanometers and most preferable, 80 to 200 nanometers) derived from a) 2 to 20 wt.% of at least one acetoacetyl functional monomer such as acetoacetoxy ethyl methacrylate(sufficient to meet the component (i) per claim 4), b)0.2 to 10 wt.% of acid functional monomer such as acrylic acid, methacrylic acid, etc.(sufficient to meet the copolymerized acid monomer component per claims 1 and 4) and optionally, at least one monomeric or polymeric acrylic or methacrylic acid ester such as methyl acrylate, methyl methacrylate, ethyl acrylate, ethyl methacrylate, propyl acrylate, propyl methacrylate, butyl acrylate, butyl methacrylate, 2-ethyl hexyl acrylate, 2-ethyl hexyl methacrylate, decyl acrylate, decyl methacrylate, hydroxyethyl acrylate, hydroxyethyl methacrylate, hydroxypropyl acrylate, hydroxypropyl methacrylate and combinations thereof, at least one polymeric or monomeric alkene such as ethylene or at least one vinyl monomer or polymer such as acrylamide, acrylonitrile, 1,2-butadiene, 1,3-butadiene, chloroprene, 1,3,5-hexatriene, styrene, alpha-methyl styrene, vinyl acetate, vinyl chloride, vinyl toluene, vinyl versatate, vinylidene chloride or combinations thereof(which includes monomers sufficient to meet the

ethylenically unsaturated nonionic monomers having a water solubility of less than 8%, and at least 8% per claims 1 and 4), provided that any such additional optional ingredient is addition-polymerizable with the aforementioned acetoacetoxy functional moiety and the acid moiety-containing components, and 0% to 2% of an ureido functional monomer may be included in the latex polymer for further improvements in adhesion to substrates. Rokowski et al, @ the paragraph bridging cols. 6 & 7, further teach that the latex binder may comprise additional ingredients such as polymer thickeners, surfactants, polymeric flow modifying ingredients and various dispersion or emulsion polymers and solution polymers and that the latex polymers suitable for use in the present invention may be prepared by well known polymerization techniques, such as suspension polymerization and emulsion polymerization of ethylenically unsaturated, emulsion polymerization being preferred. See, e.g., the Abstract, the paragraph bridging cols. 1 and 2, cols. 4-16, Runs inclusive, col. 17, lines 1-32 and the claims of Rokowski et al. More specifically, Rokowski et al exemplify aqueous coating compositions containing at least 0.8 grams(1.6 wt.%, according to the Examiner's calculations) of Triton X 405(an alkylphenol ethoxylate, sufficient to meet the nonionic surfactant per claims 1 and 4), 495.4 grams of Latex Polymer IV governed by a particle size of 90 nanometers and derived from butyl acrylate(57 wt.%), methyl methacrylate(41 wt.%) and acrylic acid(2.5 wt.%), 494.8 grams of Latex Polymer V governed by a particle size of 91 nanometers and derived from butyl acrylate(54.0 wt.%), methyl methacrylate(43.5 wt.%) and acrylic acid(2.5 wt.%) or 499.6 grams of Latex Polymer VI governed by a particle size of 97 nanometers and derived from butyl acrylate(51.0 wt.%), methyl methacrylate(38.5 wt.%), acetoacetoxy ethyl methacrylate(8.0 wt.%) and acrylic acid(2.5 wt.%) wherein the Latex polymers IV, V and VI overlap in scope with the emulsion polymer per claim 1 and Latex polymer VI overlaps in scope with the emulsion polymer per claim 4, with the understanding that the optional use of a chain transfer agent would have been readily envisaged. See Runs 4, 5, 6 and 8. Therefore, Rokowski et al anticipate the instantly claimed invention with the understanding that Latex Polymers having acid numbers and particle sizes(claims 3 and 5) falling within the scope of the claimed invention would have been readily envisaged following the guidelines of Rokowski et al @ col. 5, lines 23-38 and 58-64 who teach equivalent latex polymers having acid nos. of from 1 to 70 and particle sizes of from 30 to 800 nanometers and with the understanding that the glass transition temperature(Tg) of the exemplified polymers may very well meet the claimed glass transition temperature limitations since the Latex Polymers of Rokowski et al are essentially the same as and made under essentially the same conditions as the claimed emulsion polymer and in the absence of the USPTO to have at its disposal the tools or

facilities deemed necessary to make physical determinations of this sort. The onus to show that this, in fact, is not the case is shifted to applicants to prove otherwise as per *In re Best et al*, 195 USPQ 430. The “consisting essentially of” transitional phrase per claims 1 and 4 only precludes those components that would materially alter the basic and novel characteristics of the claimed invention(*Ex parte Davis*, 80 USPQ 448 and *In re Janakirama-Rao*(317 F 2d 951, 137 USPQ 893).

As to the claimed property “having improved adhesion to friable surfaces, it would be reasonably expected to be possessed by the aforementioned, aqueous coating compositions of Rokowski et al since it is well settled that when a claimed product reasonably appears to be substantially the same as the product disclosed in the prior art, the burden of proof is on applicants to prove that the prior art product does not inherently or necessarily possess the characteristics attributed to the claimed product(*In re Spada*, 15 USPQ 2d 1655(CAFC 1990)).

As to the limitation “wherein said emulsion polymer is made without the use of chain transfer agents” per amended claims 1 & 4, Rokowski et al @ col. 8, lines 2-5 teaches that a chain transfer agent may be used at this time or, if desired, at a later stage described below for regulating the peak molecular weight of the latex polymer, which clearly translates to the use of the “chain transfer agent”, as an optional component.

The disclosure of a composition of matter in a reference may be anticipatory even though the reference indicates that the composition is not preferred or even that it is unsatisfactory for the intended purpose. *In re Nehrenberg* 126 USPQ 383. Similarly, all disclosures of the prior art, including unpreferred or auxiliary embodiments, must be considered in determining obviousness. *In re Mills*, 176 USPQ 196 (CCPA 1972); *In re Lamberti*, 192 USPQ 278; *In re Boe*, 148 USPQ 507. A reference is available for all that it teaches, including disclosures that teach away from invention as well as disclosures that point toward invention.

Ashland Oil, Inc. v. Delta Resins & Refractories, Inc., 776 F.2d 281, 296 (Fed. Cir. 1985)

Even if it turn out that this is not the case, it would have been obvious to the skilled artisan to omit the chain transfer agent along with its function(peak molecular weight of the latex polymer). II. ELIMINATION OF A STEP OR AN ELEMENT AND ITS FUNCTION A. Omission of an Element and Its Function Is Obvious If the Function of the Element Is Not Desired *Ex parte Wu* , 10 USPQ 2031 (Bd. Pat. App. & Inter. 1989) (Claims at issue were directed to a method for inhibiting corrosion on metal surfaces using a composition consisting of epoxy resin, petroleum sulfonate, and hydrocarbon diluent. The claims were rejected over a primary reference, which disclosed an anticorrosion composition

of epoxy resin, hydrocarbon diluent, and polybasic acid salts wherein said salts were taught to be beneficial when employed in a freshwater environment, in view of secondary references which clearly suggested the addition of petroleum sulfonate to corrosion inhibiting compositions. The Board affirmed the rejection, holding that it would have been obvious to omit the polybasic acid salts of the primary reference where the function attributed to such salt is not desired or required, such as in compositions for providing corrosion resistance in environments which do not encounter fresh water.). See also *In re Larson*, 340 F.2d 965, 144 USPQ 347 (CCPA 1965) (Omission of additional framework and axle which served to increase the cargo carrying capacity of prior art mobile fluid carrying unit would have been obvious if this feature was not desired.); and *In re Kuhle*, 526 F.2d 553, 188 USPQ 7 (CCPA 1975) (deleting a prior art switch member and thereby eliminating its function was an obvious expedient). See M.P.E.P. § 2144.04.

B. Omission of The omission of an element with consequent loss of function is obvious. *In re Kuehl* 177 USPQ 250. Even if it turns out that the claimed invention(1-5) is not anticipated, it would have been obvious to the skilled artisan to extrapolate the aqueous coating composition per claims 1-5 from Rokowski et al as per such having been within the general purview of the disclosure of Rokowski et al and with a reasonable expectation of success, with the understanding that the selection of monomer(s) in both content and character so as to arrive at the claimed Tg is well within the skill of the routine worker in the art and the so called "improvement of adhesion to friable surfaces" would necessarily flow from the suggestion in the prior art to make the modification(*Ex parte Obiaya*, 227 USPQ 58, 60 (Bd. Pat. App. & Int. 1985)).

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.

4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

10. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

11. Claims 11 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rokowski et al(U.S. 5,534,310).

Rokowski et al is relied on for all that it teaches as applied to claims 1-5 and as stated in the Grounds of Rejection supra.

Further, the disclosure of Rokowski et al differs basically from the claimed invention as per the content of surfactant exemplified being slightly outside the scope of the claimed invention. However, the concentration of surfactants permitted at col. 6, line 67 translates to a generic teaching which necessarily implies that any content of surfactant, including the claimed content of surfactant, would have been operable within the scope of patentees invention and with a reasonable expectation of success. Criticality for such, clearly commensurate in scope with the claims, not having been demonstrated on this record.

Response to Arguments

12. Applicant's arguments filed February 09, 2004 have been fully considered but they are not persuasive.

Relative to Rokowski et al—The crux of Counsel's arguments appears to hinge on polymers that are made using chain transfer agents per Rokowski v. polymers that are made without the use of chain transfer agents per the instant invention. To this end, Rokowski et al @ col. 8, lines 2-5 teaches that a chain transfer agent may be used at this time or, if desired, at a later stage described below for regulating the peak molecular weight of the latex polymer", which clearly translates to the use of the "chain transfer agent", as an optional component. Moreover, Latex polymers I and IV are made without the use of a chain transfer agent and thus supports the Examiners reasoning.

As to the Violation of Written Description(New Matter)—While Counsel argues that the limitation “wherein said emulsion polymer is made without the use of chain transfer agents” per claims 1 & 4 does not constitute New Matter and relies on the description @ page 7, lines 7-9(correction, page 6 @ lines 3-5) in view of Example 1 to support the theory that, in some embodiments of the present invention, chain transfer agents are not used. To this end, absent the phrase “may or may not be used” in view of the use of “n-Dodecyl mercaptan”, chain transfer agent” listed as an ingredient in the Glossary prefacing the Examples which would necessarily infer that a chain-transfer agent was used in forming the Emulsion polymer per Run 1 which translates to applicant was not in possession of the invention, as claimed, in view of the disclosure of the application, as filed and, as such, this constitutes New Matter.

Conclusion

13. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, THIS ACTION IS MADE FINAL. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Judy M. Reddick whose telephone number is (571)272-1110. The examiner can normally be reached on Monday-Friday, 6:30 a.m.-3:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wu can be reached on (571)272-1114. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Judy M. Reddick
Judy M. Reddick
Primary Examiner
Art Unit 1713

JMR JML
05/12/04